

Claims

1. A device for stabilising and/or positioning a medical tool in a body cavity comprising
an elongated tubular structure (1) with an
5 end for insertion in the body cavity;
at least one inflatable balloon (3,4) connected to at least one capillary tube (5) and inflatable by pressing a fluid and/or gas into said tube and
a means (7) for receiving a medical tool.
- 10 2. The device of claim 1, wherein said at least one balloon (3,4) is arranged at a distance from said medical tool.
3. The device of any of claims 1 or 2, wherein said elongated tubular structure (1) further comprises at least one surface opening (2) and said at least
15 one inflatable balloon (3,4) is located at said at least one surface opening (2), preferably at least two surface openings (2) and at least two inflatable balloons (3,4) located at said surface openings (2), more preferably at
20 least four surface openings (2) and at least four inflatable balloons (3,4) located at said surface openings (2).
4. The device of claim 3, wherein said surface openings (2) are uniformly distributed along a circumference of said elongated tubular structure (1) and
25 the centres of all surface openings (2) are at equal distant from the end of the elongated tubular structure (1) to be inserted in the body cavity.
5. The device of any of claims 1 to 4, wherein said means (7) for receiving a medical tool is a
30 recess having a polygonal profile.
6. The device of any of claims 1 to 5, wherein said elongated tubular structure (1) further comprises a means (6) for forcing the balloons to expand outside said elongated tubular structure (1).
- 35 7. The device of claim 6, wherein said means (6) for forcing the balloons to expand outside said elongated tubular structure (1) is a ring.

8. The device of any of claims 6 or 7, wherein said capillary tubes (5) are fixed to said means (6) for forcing the balloons to expand outside said elongated tubular structure (1).

5 9. The device of any of claims 1 to 8, wherein said medical tool is an Atomic force microscope.

10 10. The device of any of claims 1 to 9, wherein said elongated tubular structure 1 comprises a first part and a second part which are connected by a connecting means (9).

11. Medical instrument comprising a device of any of claims 1 to 9 and a medical tool, wherein said medical tool is an Atomic force microscope.

15 12. A method for stabilising and/or positioning a medical tool in a body cavity comprising the steps of:

20 Introducing a device comprising a medical tool and at least one inflatable balloon arranged in a distance from said medical tool in a body cavity, inflating said at least one balloon with a liquid and/or gas until said at least one inflated balloon contacts an inner surface of the body cavity and the medical tool is stabilised and/or positioned.

25 13. The method of claim 12, wherein the at least one inflatable balloon is inflated by a liquid, preferably a physiological liquid.

14. The method of any of claims 12 or 13, wherein said device comprises at least two balloons, preferably at least four balloons.

30 15. The method of any of claims 12 to 14, wherein said body cavity is a joint.

16. The method of claim 15, wherein the joint is the knee joint.